dnr.mo.gov

Big Island Sewer Company P.O. Box 491 Roach, MO 65787

Dear Permittee:

Missouri State Operating Permit MO-0123013 issued on June 18, 2010 is hereby modified as per the enclosed. This modification is to add an adjusted design flow for fee purposes to the permit. Special condition #7 was also added to the permit because it relates to the adjusted design flow. The enclosed permit is for your official record.

Effective January 1, 2011, the Missouri Department of Natural Resources no longer has statutory authority to collect water permit fees for operating permits. Please note that these permit fees may be reinstated at a future date. If fees are reinstated, your annual fee will be calculated at the new adjusted flow.

Please read your permit and enclosed Standard Conditions. They contain important information on monitoring requirements, effluent limitations, sampling frequencies and reporting requirements.

This modification does not affect any monitoring or analysis of the effluent that may be necessary to comply with other requirements of your permit or other state regulations and does not in any way relieve you of your obligations to achieve the final effluent limitations as provided in the permit.

This permit is both your Federal Discharge Permit and your new State Operating Permit and replaces all previous State Operating Permits for this facility. In all future correspondence regarding this facility, please refer to your State Operating Permit number and facility name as shown on page one of the permit.

Please be aware that nothing in this permit relieves the permittee of any other legal obligations or restrictions, such as other federal or state laws, court orders, or county or other local ordinances or restrictions.

If you were adversely affected by this decision, you may be entitled to an appeal before the administrative hearing commission pursuant to 10 CSR 20-1.020 and Section 621.250, RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission. Any appeal shall be directed to: Administrative Hearing Commission, Truman Building, Room 640, 301 W. High Street, P.O. Box 1557, Jefferson City, MO 65102, Phone: 573-751-2422, Fax: 573-751-5018, website: www.oa.mo.gov/ahc.

Big Island Subdivision Page 2

If you have any questions concerning this permit please contact Mr. Chris Ray of my staff by calling 417-891-4300 or via mail at Southwest Regional Office, 2040 W. Woodland, Springfield, MO 65807-5912.

Sincerely,

SOUTHWEST REGIONAL OFFICE

Cynthia S. Davies Regional Director

CSD/crk

Enclosures

c: Mr. Byron Murray, Water Protection Program Budget and Fees Unit

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.	MO-0123013
Owner: Address:	Big Island Sewer Company PO Box 491, Roach, MO 65787
Continuing Authority: Address:	Same as Above Same as Above
Facility Name: Facility Address:	Big Island Subdivision WWTF Lake Road AA-1109, Roach MO 65787
Legal Description: Lat/Long:	SW ¹ / ₄ , NW ¹ / ₄ , SW ¹ / ₄ , Sec. 06, T38N, R17W, Camden County +3803471 /09250503
Receiving Stream: First Classified Stream and ID: USGS Basin & Sub-watershed No.:	Lake of the Ozarks (L2) 303 (d) Lake of the Ozarks (L2) (07205) 303 (d) (10290110-020007)
is authorized to discharge from the facility of as set forth herein:	described herein, in accordance with the effluent limitations and monitoring requirements
FACILITY DESCRIPTION Outfall #001 – Subdivision / Sewerage Wor	ks - SIC #4952 / 4952
Septic tank / recirculating sand filter / chlori	ination / dechlorination / sludge disposal by contract hauler.
Design organic population equivalent is 851 Design average daily flow is 64,150 gallons Design sludge production is 6.0 dry tons/yea	per day. Adjusted design flow for fee purposes is 22,999 gallons per day.
	charges under the Missouri Clean Water Law and the National Pollutant Discharge the regulated areas. This permit may be appealed in accordance with Section 644.051.6 of

Sara Parker Pauley, Director, Department of Natural Resources

Davies, Regional Director, Southwest Regional Office

February 18, 2011

Revised

June 18, 2010

June 17, 2015

Expiration Date

Effective Date

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 2 of 7

PERMIT NUMBER MO-0123013

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective **upon issuance** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

J 1						
OUTFALL NUMBER AND	UNITS	FINAL EFI	FLUENT LIM	MONITORING REQ	UIREMENTS	
EFFLUENT PARAMETER(S)	UNITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY	MEASUREMENT FREQUENCY	SAMPLE TYPE
		MAXIMUM	AVERAGE	AVERAGE	FREQUENC I	TIPE
Outfall #001						
Outlan #001						
Flow	GPD	*		*	once/quarter**	24 hr. total
					1	
Biochemical Oxygen Demand ₅	mg/L		30	20	once/quarter**	****
	C				1	
Total Suspended Solids	mg/L		30	20	once/quarter**	****
					_	
pH – Units	SU	***		***	once/quarter**	grab
Fecal Coliform (Note 1)	#/100 ml	1000		400 (Note 2)	once/quarter**	grab
	~	0.010.01.4.0		0.000 % (3.1 / 4)		_
Total Residual Chlorine as Cl ₂	mg/L	0.019 (Note 3)		0.0095 (Note 3)	once/quarter**	grab
		(0.13 ML)		(0.13ML)		
Total Dhaomhanna an D	/T	*		*		****
Total Phosphorus as P	mg/L	*		*	once/quarter**	ጥጥጥ
Total Nitrogen	ma/I	*		*	once/quarter**	****
Total Nidogen	mg/L	•			once/quarter ·	
Ammonia as N	mg/L	12.1		4.9	once/quarter**	grab
Anmona as IV	mg/L	12.1		7.7	onec/quarter	grao
Temperature	°C	*		*	once/quarter**	grab
Temperature	C				onee, quarter	gruo
OUTFALL NUMBER AND		DAILY	WEEKLY	MONTHLY		
EFFLUENT PARAMETER(S)	UNITS	MINIMUM	AVERAGE MINIMUM	AVERAGE MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
ETTECHT THOUSETER(S)			WIINIWICIVI	MINIMONI	TREQUERCT	THE
Outfall #001						
0 0 0 0 0 1						
Dissolved Oxygen	mg/L	*		*	once/quarter**	grab
					4	5
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE April 28, 2011. THERE SHALL BE NO						
DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
	%					24 hour
Whole Effluent Toxicity (WET) Test Survival			peciai Condit	10115 #0		composite

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u>, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MONITORING REPORTS SHALL BE SUBMITTED ONCE/PERMIT CYCLE; THE FIRST REPORT IS DUE January 28, 2014.

MO 780-0010 (8/91)

A. <u>EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</u> (continued)

- * Monitoring requirement only.
- ** Sampling shall occur once per quarter in the periods of January through March, April through June, July through September, and October through December, please note that monitoring reports shall be submitted no later than the 28th day of the month following the monitoring period (April 28th, July 28th, October 28th, and January 28th, respectively).
- *** pH is measured in pH units and is not to be averaged. The pH for all facilities except lagoons is limited to the range of 6.0-9.0 pH units.

Page 3 of 7 Permit No. MO-0123013

A. <u>EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</u> (continued)

- **** A composite sample made up from a minimum of four grab samples collected within a 24-hour period with a minimum of two hours between each grab sample. A person may physically collect the four grab samples or a composite sampler may be set up to collect the four grab samples.
- Note 1 Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31.
- Note 2 Monthly average limit for Fecal Coliform is expressed as a geometric mean. Geometric mean for $n \text{ samples} = [a_1 \times a_2 \times a_3 \dots \times a_n]^{1/n}$
- Note 3 This permit contains a Total Residual Chlorine (TRC) limit.
 - (a) This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The department has determined the current acceptable ML for total residual chlorine to be 0.13 mg/L when using the DPD Colorimetric Method #4500 CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 0.13 mg/L will be considered violations of the permit and values less than the minimum quantification level of 0.13 mg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit.
 - (b) Disinfection is required year-round unless the permit specifically states that "Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31." If your permit does not require disinfection during the non-recreational months, do not disinfect in those months. If the facility uses chlorine year-round to meet the Final Ammonia effluent limitations (Break-Point Chlorination), then the Total Residual Chlorine effluent limit shall be met and tested year-round.
 - (c) Do not chemically dechlorinate if it is not needed to meet the limits in your permit.
 - (d) If no chlorine was used in a given sampling period, an actual analysis is not necessary. Simply report as "0 mg/L" TRC.

C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (2) controls any pollutant not limited in the permit.
 - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to a facility with an area-wide management plan per 10 CSR 20-6.010(3)(B) within 90 days of notice of its availability.

C. <u>SPECIAL CONDITIONS</u> (continued)

4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 μg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 5. Report as no-discharge when a discharge does not occur during the report period.

6. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 7. The permit holder shall maintain the discharges from this facility such that the average flow does not exceed the "Adjusted Design Flow" indicated on the front page of this permit. Average flow (MGD) shall be determined by averaging the flow readings on the discharge monitoring reports for the past year times a factor of 1.15.

An average flow in excess of the adjusted design flow is a permit violation.

Page 5 of 7 Permit No. MO-0123013

C. <u>SPECIAL CONDITIONS</u> (continued)

8. Whole Effluent Toxicity (WET) tests shall be conducted as follows:

OUTFALL	AEC	FREQUENCY	SAMPLE TYPE	MONTH
001	100 %	Once/permit cycle	24 hr. composite	Any in the year 2013, but report in January

Dilution Series						
100%	50%	25%	12.5%	6.25%	(Control) 100% upstream, if available	(Control) 100% Lab Water, also called synthetic water

- (a) Test Schedule and Follow-Up Requirements
 - (1) Perform a MULTIPLE-dilution acute WET test in the months and at the frequency specified above. For tests which are successfully passed, submit test results using the Department's WET test report form #MO-780-1899 along with complete copies of the test reports as received from the laboratory, including copies of chain-of-custody forms within 30 calendar days of availability to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102. If the effluent passes the test, do not repeat the test until the next test period.
 - (a) For discharges of stormwater, samples shall be collected within three hours from when discharge first occurs.
 - (b) Samples submitted for analysis of stormwater discharges shall be collected as a grab.
 - (c) For discharges of non-stormwater, samples shall be collected only when precipitation has not occurred for a period of forty-eight hours prior to sample collection. In no event shall sample collection occur simultaneously with the occurrence of precipitation excepting for stormwater samples.
 - (d) A twenty-four hour composite sample shall be submitted for analysis of non-stormwater discharges.
 - (e) Upstream receiving water samples, where required, shall be collected upstream from any influence of the effluent where downstream flow is clearly evident.
 - (f) Samples submitted for analysis of upstream receiving water may be collected as either a grab or twenty-four-hour composite as appropriate to the nature of the discharge.
 - (g) Chemical and physical analysis of the upstream control and effluent sample shall occur immediately upon being received by the laboratory, prior to any manipulation of the effluent sample beyond preservation methods consistent with federal guidelines for WET testing that are required to stabilize the sample during shipping.
 - (h) Any and all chemical or physical analysis of the effluent sample performed in conjunction with the WET test shall be performed at the 100% Effluent concentration in addition to analyses performed upon any other effluent concentration.
 - (i) All chemical analyses included in the Missouri Department of Natural Resources WET test report form #MO-780-1899 shall be performed and results shall be recorded in the appropriate field of the report form.
 - (j) Where flow-weighted composite sample is required for analysis, the samples shall be composited at the laboratory where the test is to be performed.
 - (k) Where in stream testing is required downstream from the discharge, sample collection shall occur immediately below the established Zone of Initial Dilution in conjunction with or immediately following a release or discharge.
 - (l) Samples submitted for analysis of downstream receiving water may be collected as either a grab or twenty-four-hour composite as appropriate to the nature of the discharge.
 - (m) All instream samples, including downstream samples, shall be tested for toxicity at the 100% concentration in addition to any other assigned AEC for in-stream samples.
 - (2) All failing test results along with complete copies of the test reports as received from the laboratory, INCLUDING THOSE TESTS CONDUCTED UNDER CONDITION (3) BELOW, shall be reported to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102 within 14 calendar days of the availability of the results.
 - (3) If the effluent fails the test, a multiple dilution test shall be performed for BOTH test species within 30 calendar days and biweekly thereafter (for storm water, tests shall be performed on the next and subsequent storm water discharges as they occur, but not less than 7 days apart) until one of the following conditions are met:
 - (a) THREE CONSECUTIVE MULTIPLE-DILUTION TESTS PASS. No further tests need to be performed until next regularly scheduled test period.

C. <u>SPECIAL CONDITIONS</u> (continued)

(b) A TOTAL OF THREE MULTIPLE-DILUTION TESTS FAIL.

- (4) Failure of at least two multiple-dilution tests during any period of accelerated monitoring violates the permit narrative requirement for aquatic life protection.
- (5) The permittee shall submit a summary of all test results for the test series along with complete copies of the test reports as received from the laboratory to the WATER PROTECTION PROGRAM, P.O. Box 176, Jefferson City, MO 65102 within 14 calendar days of the third failed test.
- (6) Additionally, the following shall apply upon failure of the third MULTIPLE DILUTION test: A toxicity identification evaluation (TIE) or toxicity reduction evaluation (TRE) is automatically triggered. The permittee shall contact THE WATER PROTECTION PROGRAM within 14 calendar days from availability of the test results to ascertain as to whether a TIE or TRE is appropriate. The permittee shall submit a plan for conducting a TIE or TRE to the WATER PROTECTION PROGRAM within 60 calendar days of the date of DNR's direction to perform either a TIE or TRE. This plan must be approved by DNR before the TIE or TRE is begun. A schedule for completing the TIE or TRE shall be established in the plan approval.
- (7) Upon DNR's approval, the TIE/TRE schedule may be modified if toxicity is intermittent during the TIE/TRE investigations. A revised WET test schedule may be established by DNR for this period.
- (8) If a previously completed TIE has clearly identified the cause of toxicity, additional TIEs will not be required as long as effluent characteristics remain essentially unchanged and the permittee is proceeding according to a DNR approved schedule to complete a TRE and reduce toxicity. Regularly scheduled WET testing as required in the permit, without the follow-up requirements, will be required during this period.
- (9) When WET test sampling is required to run over one DMR period, each DMR report shall contain a copy of the Department's WET test report form that was generated during the reporting period.
- (10) Submit a concise summary in tabular format of all WET test results with the annual report.

(b) PASS/FAIL procedure and effluent limitations:

- (1) To pass a multiple-dilution test:
 - (a) For facilities with a computed percent effluent at the edge of the zone of initial dilution, Allowable Effluent Concentration (AEC) OF 30% OR LESS, the AEC must be less than three-tenths (0.3) of the LC₅₀ concentration for the most sensitive of the test organisms; **OR**,
 - (b) For facilities with an AEC greater than 30%, the LC50 concentration must be greater than 100%; AND,
 - (c) all effluent concentrations equal to or less than the AEC must be nontoxic. Mortality observed in all effluent concentrations equal to or less than the AEC shall not be significantly different (at the 95% confidence level; p = 0.05) than that observed in the upstream receiving-water control sample. Where upstream receiving water is not available mortality observed in the AEC test concentration shall not be significantly different (at the 95% confidence level; p = 0.05) than that observed in the laboratory control. The appropriate statistical tests of significance shall be consistent with the most current edition of METHODS FOR MEASURING THE ACUTE TOXICITY OF EFFLUENTS AND RECEIVING WATERS TO FRESHWATER AND MARINE ORGANISMS or other federal guidelines as appropriate or required. Failure of one multiple-dilution test may be considered an effluent limit violation.

(c) Test Conditions

- (1) Test Type: Acute Static non-renewal
- (2) All tests, including repeat tests for previous failures, shall include both test species listed below.
- (3) Test species: Ceriodaphnia dubia and Pimephales promelas (fathead minnow). Organisms used in WET testing shall come from cultures reared for the purpose of conducting toxicity tests and cultured in a manner consistent with the most current USEPA guidelines. All test animals shall be cultured as described in the most current edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms.
- (4) Test period: 48 hours at the "Acceptable Effluent Concentration" (AEC) specified above.
- (5) Upstream receiving stream water shall be used as dilution water. If upstream water is unavailable or if mortality in the upstream water exceeds 10%, "reconstituted" water will be used as dilution water. Procedures for generating reconstituted water will be supplied by the MDNR upon request.
- (6) Multiple-dilution tests will be run with:
 - (a) 100%, 50%, 25%, 12.5%, and 6.25% effluent, unless the AEC is less than 25% effluent, in which case dilutions will be 4 times the AEC, two times the AEC, AEC, 1/2 AEC and 1/4 AEC;
 - (b) 100% receiving-stream water (if available), collected upstream of the outfall at a point beyond any influence of the effluent; and
 - (c) reconstituted water.
- (7) If reconstituted-water control mortality for a test species exceeds 10%, the entire test will be rerun.
- (8) If upstream control mortality exceeds 10%, the entire test will be rerun using reconstituted water as the dilutant.

C. SPECIAL CONDITIONS (continued)

SUMMARY OF TEST METHODOLOGY FOR ACUTE WHOLE-EFFLUENT TOXICITY TESTS

Whole-effluent-toxicity test required in NPDES permits shall use the following test conditions when performing single or multiple dilution methods. Any future changes in methodology will be supplied to the permittee by the Missouri Department of Natural Resources (MDNR). Unless more stringent methods are specified by the DNR, the procedures shall be consistent with the most current edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms,

Test conditions for Ceriodaphnia dubia:

Test duration: 48 h

Temperature: $25 \pm 1^{\circ}\text{C}$ Temperatures shall not deviate by more than 3°C during

the test.

Light Quality: Ambient laboratory illumination

Photoperiod: 16 h light, 8 h dark
Size of test vessel: 30 mL (minimum)
Volume of test solution: 15 mL (minimum)

Age of test organisms: <24 h old

No. of animals/test vessel: 5
No. of replicates/concentration: 4

No. of organisms/concentration: 20 (minimum)

Feeding regime: None (feed prior to test)

Aeration: None

Dilution water: Upstream receiving water; if no upstream flow, synthetic water

modified to reflect effluent hardness.

Endpoint: Pass/Fail (Statistically significant Mortality when compared to

upstream receiving water control or synthetic control if upstream

water was not available at $p \le 0.05$)

Test acceptability criterion: 90% or greater survival in controls

Test conditions for Pimephales promelas:

No. of organisms/concentration:

Test duration: 48 h

Temperature: $25 \pm 1^{\circ}\text{C}$ Temperatures shall not deviate by more than 3°C during

the test.

Light Quality: Ambient laboratory illumination

Photoperiod: 16 h light/ 8 h dark
Size of test vessel: 250 mL (minimum)
Volume of test solution: 200 mL (minimum)
Age of test organisms: 1-14 days (all same age)

No. of animals/test vessel:

No. of replicates/concentration: 4 (minimum) single dilution method

2 (minimum) multiple dilution method 40 (minimum) single dilution method 20 (minimum) multiple dilution method

Feeding regime: None (feed prior to test)

Aeration: None, unless DO concentration falls below 4.0 mg/L; rate should

not exceed 100 bubbles/min.

Dilution water: Upstream receiving water; if no upstream flow, synthetic water

modified to reflect effluent hardness.

Endpoint: Pass/Fail (Statistically significant Mortality when compared to

upstream receiving water control or synthetic control if upstream

water was not available at $p \le 0.05$)

Test Acceptability criterion: 90% or greater survival in controls

Missouri Department of Natural Resources Statement of Basis MSOP #: MO-0123013

This Statement of Basis (Statement) gives pertinent information regarding minor/simple modification(s) to the above listed operating permit without the need for a public comment process.

A Statement is not an enforceable part of a Missouri State Operating Permit.

FACILITY DESCRIPTION

Outfall #001 – Subdivision / Sewerage Works - SIC #4952 / 4952

Septic tank / recirculating sand filter / chlorination / dechlorination / sludge disposal by contract hauler.

Design organic population equivalent is 851.

Design average daily flow is 64,150 gallons per day. Adjusted design flow for fee purposes is 22,999 gallons per day.

Design sludge production is 6.0 dry tons/year.

MODIFICATION RATIONALE

This operating permit is hereby modified to add an adjusted design flow to the permit for fee purposes. A Special condition (#7) was added to the permit that pertains to ADFs.

No other changes were made at this time.